Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn From Consideration) A perpendicular magnetic recording medium comprising:

a nonmagnetic substrate;

a first under layer formed on the nonmagnetic substrate and containing iron as a main component;

a second under layer formed on the first under layer and containing mainly ruthenium; and

a magnetic recording layer formed on the second under layer and containing mainly cobalt.

2. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 1, wherein said first under layer further contains an auxiliary component selected from the group consisting of a combination of aluminum and silicon, a combination of tantalum and carbon, a combination of zirconium and nitrogen, and cobalt.

3. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 1, wherein said magnetic recording layer further contains at least one of platinum and chromium.

4. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 1, wherein said magnetic recording layer further contains platinum and oxygen.

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5. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 1, wherein said magnetic recording layer has a multi-layered structure prepared by alternately laminating a ferromagnetic layer containing cobalt and a nonmagnetic layer mainly containing one element selected from the group consisting of ruthenium, palladium and platinum.

6. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 1, further comprising a soft magnetic layer formed between said nonmagnetic substrate and said first under layer.

7. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 6, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy, cobalt-zirconium-nitrogen series alloy, and an iron-cobalt series alloy.

8. (Withdrawn From Consideration) A perpendicular magnetic recording medium comprising:

a nonmagnetic substrate;

a first under layer formed on the nonmagnetic substrate and containing cobalt;

a second under layer formed on the first under layer and containing mainly ruthenium; and

a magnetic recording layer formed on the second under layer and containing cobalt as a main component.

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9. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, wherein said first under layer further contains at least one auxiliary component is one of a combination of zirconium and niobium and chromium.

10. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, wherein said first under layer does not exhibit ferromagnetism.

11. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, wherein said magnetic recording layer further contains at least one of platinum and chromium.

12. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, wherein said magnetic recording layer further contains platinum and oxygen.

13. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, wherein said magnetic recording layer has a multi-layered structure prepared by alternately forming a ferromagnetic layer containing cobalt and a nonmagnetic layer containing mainly one of ruthenium, palladium and platinum.

14. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 8, further comprising a soft magnetic layer interposed between said nonmagnetic substrate and said first layer.

15. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 14, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy and an iron-cobalt series alloy.

16. (Withdrawn From Consideration) A perpendicular magnetic recording medium comprising:

a nonmagnetic substrate;

a first under layer formed on the nonmagnetic substrate and containing mainly ruthenium;

a second under layer formed on the first under layer and containing mainly cobalt; and

a magnetic recording layer formed on the second under layer and containing mainly cobalt.

17. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 16, wherein said second under layer further contains chromium.

18. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 17, wherein said second under layer does not exhibit a ferromagnetism.

19. (Withdrawn From Consideration) The perpendicular magnetic recording medium

according to claim 16, wherein said magnetic recording layer further contains at least one of platinum and chromium.

20. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 19, wherein said magnetic recording layer further contains platinum and oxygen.

21. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 16, wherein said magnetic recording layer has a multi-layered structure prepared by alternately forming a ferromagnetic layer containing cobalt and a nonmagnetic layer containing mainly one of ruthenium, palladium and platinum.

22. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 16, further comprising a soft magnetic layer interposed between said nonmagnetic substrate and said first under layer.

23. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 16, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy, and an iron-cobalt series alloy.

24. (Previously Amended) A perpendicular magnetic recording medium comprising;

a nonmagnetic substrate;

a first under layer formed on the nonmagnetic substrate and containing titanium;

a second under layer formed in contact with the first under layer and containing ruthenium; and

a magnetic recording layer formed in contact with the second under layer and containing cobalt.

25. (Previously Amended) The perpendicular magnetic recording medium according to claim 24, wherein said first under layer is formed of a material selected from the group consisting of a nitride, a carbide and oxide of titanium, a titanium chromium alloy, and a elemental titanium.

26. (Currently Amended) The perpendicular magnetic recording medium according to claim 25, wherein said first under layer is formed of a material selected from the group consisting of a nitride of titanium, a titanium chromium alloy, and titanium.

27. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer further contains at least one element selected from the group consisting of platinum and chromium.

28. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer further contains platinum and oxygen.

29. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer has a multi-layered structure prepared by alternately forming a ferromagnetic layer containing cobalt and a nonmagnetic layer containing one

element selected from the group consisting of ruthenium, palladium and platinum.

30. (Original) The perpendicular magnetic recording medium according to claim 24, further comprising a soft magnetic layer interposed between said nonmagnetic substrate and said first under layer.

31. (Original) The perpendicular magnetic recording medium according to claim 30, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy, a cobalt-zirconium-niobium series alloy, and an iron-cobalt series alloy.

32. (Withdrawn From Consideration) A perpendicular magnetic recording medium comprising:

a nonmagnetic substrate;

a soft magnetic layer formed on the nonmagnetic substrate;

a first under layer formed on the soft magnetic layer and containing as a main component at least one of vanadium and chromium;

a second under layer formed on the first under layer and containing mainly ruthenium; and

a magnetic recording layer formed on the second under layer and containing mainly cobalt.

33. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 32, wherein said magnetic recording layer further contains at least one of platinum and chromium.

34. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 32, wherein said magnetic recording layer further contains platinum and oxygen.

35. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 32, wherein said magnetic recording layer has a multi-layered structure prepared by alternately forming a ferromagnetic layer containing cobalt and a nonmagnetic layer containing mainly one of ruthenium, palladium and platinum.

36. (Withdrawn From Consideration) The perpendicular magnetic recording medium according to claim 32, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy cobalt zirconium-niobium series alloy, and an iron-cobalt series alloy.

37. (Previously Amended) A perpendicular magnetic recording medium, comprising:

a nonmagnetic substrate; and

a magnetic recording layer formed on the nonmagnetic substrate and having a multi-layered structure including at least two ferromagnetic layers which contain cobalt, platinum and oxygen and are laminated via a nonmagnetic layer containing ruthenium.

38. (Previously Cancelled)

39. (Previously Cancelled)

40. (Currently Amended) The perpendicular magnetic recording medium according to claim 26, wherein said titanium chromium alloy contains not more than 10 at% of chromium.

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41. (New) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer has a single-layer structure of a ferromagnetic layer containing cobalt.

42. (New) The perpendicular magnetic recording medium according to claim 29, wherein said multi-layered structure includes at least two ferromagnetic layers, and the ferromagnetic layers have the same lattice constant and the same total concentration of an added nonmagnetic element.

43. (New) The perpendicular magnetic recording medium according to claim 37, wherein said ferromagnetic layers have the same lattice constant and the same total concentration of an added nonmagnetic element.

44. (New) The perpendicular magnetic recording medium according to claim 29, wherein said nonmagnetic layer contains palladium.